

## REMARKS

Claims 1-31 are pending in the case, of which claims 8-31 are withdrawn from consideration. Claims 1-7 are rejected. Reconsideration is respectfully requested.

### §103(a) Rejection – Claims 1 and 7

Claims 1 and 7 are rejected under §103(a) as being unpatentable over Horii et al. (USP 6,573,931; hereinafter “Horii”) in view of Yamada et al. (USP 5,995,137; hereinafter “Yamada”) further in view of Fowler (USP 5,461,425) and in further view of Ewedemi et al. (U.S. Pat. Pub. No. 2001/0040631; herein after “Ewedemi”). The Examiner contends that Figure 7 and related descriptions of Horii describes substantially all limitations of claim 1 except for selecting from a group of video formats and a sensor array of digital pixels. The Examiner relies on Yamada and Fowler for reciting selecting different video formats and digital pixels. Furthermore, the Examiner contends that Horii, Yamada and Fowler are silent with regard to having separate control interface and pixel buses and the Examiner cites Ewedemi for disclosing a pixel data bus and a control bus. Applicant respectfully traverses the rejection.

Horii describes in figs. 1 and 7 a video input apparatus where a video input unit 100 is connected to a video processing unit 200 through a cable 109. The video input unit of Horii does not include any memory buffer for storing the pixel data. Instead, Horii states specifically that the “data multiplexing and demultiplexing unit 115 multiplexes the video signal 114 and control data from the system control unit, and transmits multiplexed data to the image processing unit 200” (Horii, col. 2, ln. 1-5). Therefore, the data multiplexing and demultiplexing unit 115 does not act as an image buffer for storing pixel data as the Examiner contends. Horii describes multiplexing the image data and the control data and transmitting the multiplexed data on the same bus 109.

Furthermore, Horii in col. 1, ln. 38-43, col. 2, ln. 18-22, and col. 8, ln. 5-21, describes the operation of the system control unit 106 for providing two-way communications with the image processing unit (200) and interpreting commands from the host unit (400) to execute operations requested by the host unit, the operation of the system control unit 250 for performing control of devices in image processing unit 200 and also for interpreting

commands from the host unit and executing operations requested by the host unit, and the operation of the zoom camera unit 150. Horii does not teach or suggest operation of the zoom camera unit being independent of the video processing unit.

#### Claim 1

Claim 1 recites:

1. A video imaging system, comprising:  
a digital image sensor for performing image capture operations...  
a digital image processor for performing image processing operations...  
wherein said digital image sensor and said digital image processor transfer control information over a control interface bus coupled between said first interface circuit and said second interface circuit and separate from said pixel bus and **said digital image sensor performs said image capture operations independent of said image processing operations performed by said digital image processor.** (Emphasis added.)

In the §103(a) rejection of claim 1, the Examiner combined four references: Horii, Yamada, Fowler and Ewedemi to render claim 1 obvious. Applicant submits that the Examiner must be careful to avoid **impermissible hindsight reconstruction** in arriving at the §103(a) rejection of claim 1. The Federal Circuit in *In re Fritch* states that:

It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992).

Here, the Examiner relied on four different references for various isolated disclosure of the claim limitations of claim 1. There is no motivation or suggestion in any of the references that the four references can be combined at all in the manner suggested by the Examiner. Moreover, the combination suggested by the Examiner requires wholesale changes to be made to Horii which would completely destroy the functionality of the zoom camera unit and the video processing unit in Horii.

In the response to the previous office action, Applicant explained that Horii actually teaches away from the claimed invention of claim 1 by describing the use of the same bus to transmit pixel data and control information by use of multiplexing. To that end, Horii includes Multiplexing and Demultiplexing Unit 115 and 231 in respective zoom camera unit 150 and video processing unit 200 to realize the multiplexing and demultiplexing function. A combination of Horii and Ewedemi would require the Multiplexing and Demultiplexing Units be eliminated from Horii as Ewedemi describes the use of separate control and data busses and thus no more multiplexing/demultiplexing is required.

However, the Examiner relied on Multiplexing and Demultiplexing Unit 115 to meet the limitation of the image buffer limitation of claim 1. The combination of Horii and Ewedemi would necessarily require the elimination of Multiplexing and Demultiplexing Unit 115 and therefore the combination will no longer meet the limitations of claim 1. Any attempt to introduce an image buffer back into the Horii and Ewedemi combination would be impermissible hindsight reconstruction as the Examiner is merely using the claimed invention as a template to piece together the prior art.

In view of the requirement that the Examiner must read each references as a whole, including the portion of the reference that teach away from the claimed invention, Applicant submits that Horii should be removed as a reference altogether. Horii cannot be used in the combination suggested by the Examiner because that would require one to ignore portions of Horii that teaches away from the claimed invention which is prohibited by numerous case laws. ("A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would **lead away** from the claimed invention." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983); "It is not permissible to pick and choose only so much of any given reference as will support a given position and ignore the reference in its totality." *Lubrizol Corp. v. Exxon Corp.*, 696 F. Supp. 302, 7 USPQ2d 1513, 1527 (N.D. Ohio 1988).)

Even if Horii is not removed as a reference, Horii cannot be combined with Ewedemi as suggested by the Examiner as it would require wholesale redesign of Horii and Ewedemi in accordance with the claimed invention which constitutes impermissible hindsight reconstruction.

Finally, any combination of Horii and Ewedemi and other references still does not teach or suggest all limitations of claim 1. Claim 1 recites "said digital image sensor performs said image capture operations independent of said image processing operations performed by said digital image processor." The Examiner relied on Horii for describing this limitation but in the relevant section of Horii referred to by the Examiner, Horii actually does not teach or suggest this limitation of claim 1. There is nothing in Horii that recites that the image capture operation is performed independently of the image processing operations. Horii merely describes the operation of the system control units 106 and 250 in the respective zoom camera unit and the video processing unit where the respective unit receives commands from the host unit and executes the commands. Horii does not mention any image capture operation being performed independently of the image processing operations.

#### Claim 7

Claim 7, dependent upon claim 1, is patentable over the cited references at least for the same reasons claim 1 is patentable.

For the above reasons, withdrawal of the §103(a) rejection of claims 1 and 7 is respectfully requested.

#### §103(a) Rejection – Claims 2-6

Claims 2-6 are rejected under §103(a) as being unpatentable over Horii in view of Yamada and further in view of Fowler and further in view of Ewedemi and further in view of Tamama.

Claims 2-6, dependent upon claim 1, are patentable over the Horii, Yamada, Fowler and Ewedemi at least for the same reasons claim 1 is patentable. Tamama does not cure the deficiency of Horii, Yamada, Fowler and Ewedemi. Claims 2-6 are therefore patentable over all of the cited references. Withdrawal of the §103(a) rejection of claims 2-6 is respectfully requested.

#### Rejoinder of Withdrawn Claims

Applicant submits that in the office action of February 28, 2007, Examiner indicated that claim 1 links inventions I to VI of claims 2-31 and Examiner states that claims 8-31 are

eligible for rejoinder when claim 1 is indicated to be allowable. Claims 8-31 depend from claim 1 and therefore include all the limitations of claim 1. For the reasons stated above, claim 1 is in condition for allowance. Therefore, rejoinder of claims 8-31 is respectfully requested. Claims 8-31, dependent upon claim 1, are patentable over the cited references at least for the same reasons claim 1 is patentable.

#### CONCLUSION

Claims 1-31 are pending in the present application, of which claims 8-31 are withdrawn from consideration. For the reasons stated above, claims 1-7 are in condition for allowance. Since claim 1 links the inventions of claims 2-31, withdrawn claims 8-31 are eligible for rejoinder and rejoinder of claims 8-31 is respectfully requested. If the Examiner would like to discuss any aspect of this application, the Examiner is invited to contact the undersigned at (408) 382-0480.

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Respectfully submitted,

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